

Detecting potential errors before problems occur

Service is an important consideration when making a decision such as buying a car, a computer, or medical imaging equipment. For Siemens Healthcare, service means much more than maintenance or the replacement of spare parts; Siemens Uptime Services offers numerous innovative and proactive services that enable the detection of parameter deviations in medical imaging systems before malfunctions occur. Thereby, system downtime at the customer site can be minimized; the planning reliability and the workflows in hospitals and private practices can be significantly improved. This is made possible by the remote maintenance platform Siemens Remote Service (SRS) and a comprehensive training concept for customers and Customer Service Engineers (CSEs).

Siemens Remote Service

Due to the increased patient volumes, medical imaging systems are in continuous operation every day. At the same time, for hospitals and private practices, the reliability of medical imaging systems is essential for maintaining smooth clinical workflow. Siemens is able to connect customer systems worldwide via Siemens Remote Service (SRS) to support centers to ensure that potential system malfunctions are either detected early or avoided. With the remote service platform of the service organization from Siemens Healthcare (Uptime Services) up to 50 percent of all system malfunctions can be solved remotely. Frequently, system deviations can be recognized and resolved even before problems occur. If a Customer Service Engineer is required to go to the customer's site, the problem is resolved in 75 percent of all cases during the first visit. Prior to the Customer Service Engineer's visit Siemens can determine, via SRS, which spare parts are required and deliver the necessary parts before arrival. Currently, service specialists proactively monitor approximately 20,000 systems worldwide every day. Upon start-up the system can automatically transmit messages

via the secure remote service platform, SRS, to the Siemens Service Center. This is also an environmentally friendly approach. Since many problems can be solved remotely, the number of on-site customer visits is greatly reduced, resulting in lower fuel emissions.

SRS also provides the basis for innovative service offerings, such as proactive real-time remote monitoring via the Siemens Guardian Program and the protection against malicious software attacks with Siemens Virus Protection.

Proactive online monitoring in real time: the Guardian Program

The Guardian Program provides proactive online monitoring of medical imaging systems in real time. System errors and possible deviations from predefined values can be detected and corrected before a system malfunction occurs. The results are high system reliability and availability. When system parameters fall below or exceed defined threshold values, the system automatically sends a message to the Siemens Service Center. The service specialist calls the customer within minutes. They expertly guide the customer through this essential first phase and immediately implements the respective measures.

Fast software updates through Remote Update Handling

Another task of Siemens Uptime Services is the coordination of software updates and upgrades. While a Customer Service Engineer had to be at the customer's site in the past to implement updates and upgrades, today this can be handled online via the SRS platform (Remote Update Handling). This accelerates the availability of Siemens software improvements in the customer's system. In addition, they can be implemented without disrupting the clinical workflow; the customer determines via the push of a button, when the update stages are performed.

Data security: certified by TÜV

Information security and data protection are important topics for customers. They also are treated with the highest priority in the Siemens remote service infrastructure. Siemens Healthcare runs an internationally valid information security management system (ISMS) for the remote service of medical devices. The system has been certified

by TÜV Süd in Germany according to the international standard ISO 27001. The ISMS ensures that SRS meets all requirements with respect to availability, confidentiality, integrity, and reliability. Worldwide thousands of medical devices are connected to the Siemens Remote Service platform via VPN broadband connections.

Service example: University Hospital Tuebingen

Since December 2007, the University Hospital in Tuebingen is a reference site for service by Siemens Healthcare. Customers and interested parties from all over the world are given the opportunity to familiarize themselves with service offerings such as the Siemens Guardian Program, Siemens Virus Protection, and Siemens Utilization Management. The latter provides the customer with system-specific usage data that enable full utilization of system performance and optimization of clinical workflows.

Facts and figures

With locations in 128 countries, the global service organization takes care of 60,000 customers with more than 191,000 systems installed. Approximately 3,900 Customer Service Engineers work in customer service, from which 500 specialists work in the three Regional Support Centers in Europe (Erlangen, Germany), America (Cary, USA), and Asia (Shanghai, China). Another 200 experts work in the Headquarters Support Centers which work closely with engineering departments. With respect to spare parts, 97 percent are delivered within 24 hours. Delivery is part of the global material logistics and is operated via the main distribution centers in Frankfurt (Germany), Memphis (USA) and Singapore.

The training centers in Erlangen (Germany), Cary, Concord (USA) and Shanghai (China) are equipped with the newest systems. Approximately 12,000 participants are trained in 1,400 courses per year. In addition, the service organization offers web-based training for Customer Service Engineers and customers via an e-learning platform.

Additional information regarding the service organization and its service offerings, is available at:

Siemens Uptime Services:
www.siemens.com/uptime-services

Siemens Remote Service:
www.siemens.com/remote-service

Guardian Program:
www.siemens.com/guardian-program

Virus Protection:
www.siemens.com/virus-protection

Utilization Management:
www.siemens.com/utilization-management